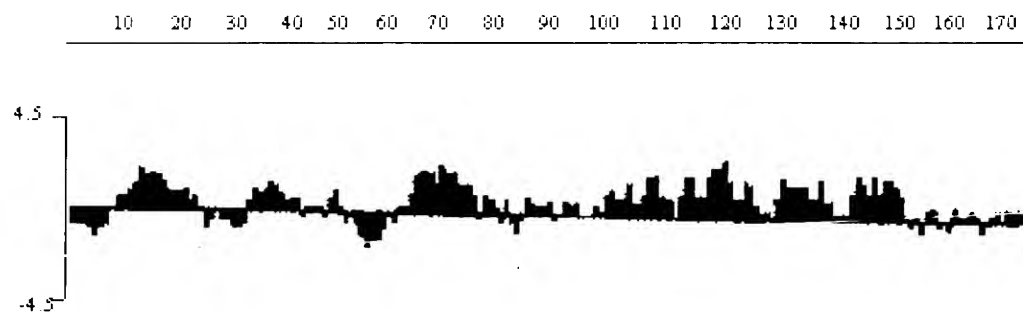


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 61 CCGGGGCTTCCGGGGCAAGCTTCGCTTCTTCAGGCAGCTCCAGGCGCTCCTAGACCTTCC  
 21 P G L P G Q A S L L Q A A P G A P E P S  
 121 AGCAGTACTTTGGTGGACGAGTTGGAGTCATCTTTTCGAGGCTTGCTTTGCATCTCTGGTG  
 41 S S T L V D E L E S S F E A C F A S L V  
 181 AGTCAGGACTATGTCAATGGCACCGATCAGGAAGAAATTCGAACCGGTGTTGATCAGTGT  
 61 S Q D Y V N G T D Q E E I R T G V D Q C  
 241 ATCCAGAAGTTTCTGGATATTGCAAGACAGACAGAATGTTTTTCTTACAAAAAAGATTG  
 81 I Q K F L D I A R Q T E C F F L Q K R L  
 301 CAGTTATCTGTCCAGAAACCAGAGCAAGTTATCAAAGAGGATGTGTCAGAACTAAGGAAT  
 101 Q L S V Q K P E Q V I K E D V S E L R N  
 361 GAATTACAGCGGAAAGATGCACTAGTCCAGAAGCACTTGACAAAGCTGAGGCATTGGCAG  
 121 E L Q R K D A L V Q K H L T K L R H W Q  
 421 CAGGTGCTGGAGGACATCAACGTGCAGCACAAAAAGCCCGCCGACATCCCTCAGGGCTCC  
 141 Q V L E D I N V Q H K K P A D I P Q G S  
 481 TTGGCTACCTGGAGCAGGCATCTGCCAACATCCCTGCACCTCTGAAGCCAACGTGAGCA  
 161 L A V L E Q A S A N I P A P L K P T \*  
 541 aagggcagag gcagttggcc tatgagtggg ctgatgogtg aggttggcca cacattcctt  
 601 cctgtggact tga cattttg gaagaa ctct ttgccagata atgagttcat ttagtttta  
 661 tgctccatt gaaaaatttt ccaattttt tataagctgt taatttcttg agtactttat  
 721 aacatgtctg tagcttggat aaacaaagta agtatttttt tttgtcttt agcaaaagttt  
 781 agactgtgaa tatgatgaca cagattcttt tttatgggtgg ctltgcttgt tttaaatttt  
 841 tgcattgactt tcatctttt tatgttgtt tctgttagt tgatccgaag gaaaagagta  
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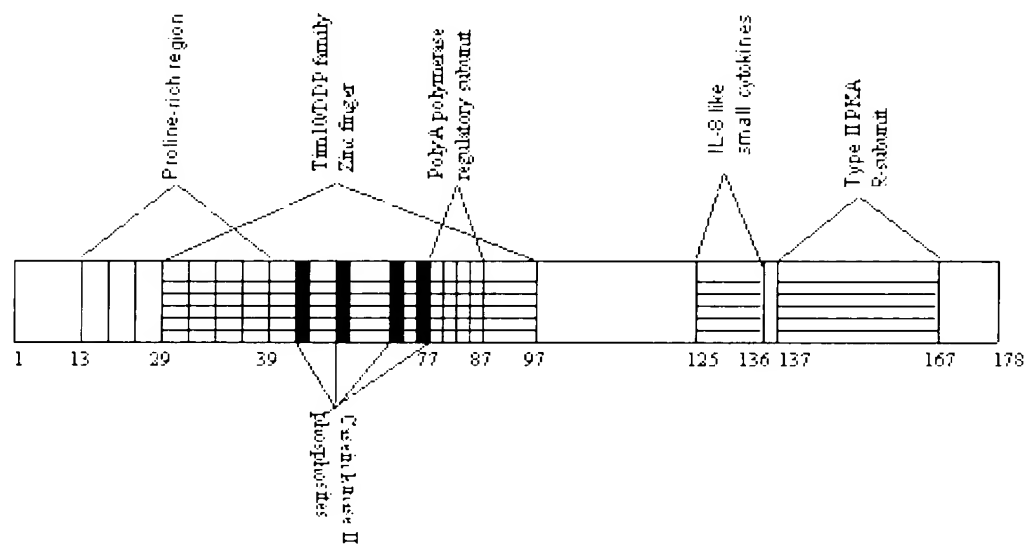
**Fig 1A**

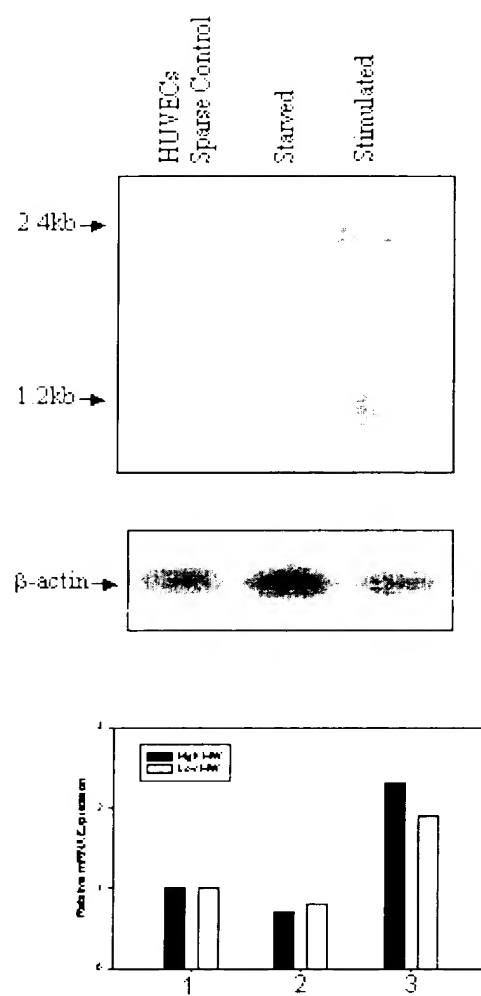
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1	MAAPLGGMFEGCPFGPPXAPFGLFGQASLLCAAPGAPRPS	Human
1	MAASLGGMFETGLFPGPPPPFGLFGQASLLCAAPGAPRPS	Mouse
1	MASNEEG	Drosophila
	NSTLVDELESSFEACFASLVSCDYVNGTDQEEIRITGVDDQ	Majority
	50 60 70 80	
41	SSTLVDELESSFEACFASLVSCDYVNGTDQEEIRITGVDDQ	Human
41	NSTLVDELESSFEACFASLVSCDYVNGTDQEEIRITGVDDQ	Mouse
8	GGNLMDEFEFAEQSCLLTATXDEPNSSGTNKKHIDLELVQNT	Drosophila
	IQKFLDIARQTECFELQKPLQLSVCKPKXQVIKEDVSELRX	Majority
	90 100 110 120	
81	IQKFLDIARQTECFELQKPLQLSVCKPKXQVIKEDVSELRX	Human
81	IQKFLDIARQTECFELQKPLQLSVCKPKXQVIKEDVSELRX	Mouse
48	ENRPLDVASQMEAFELQKPLQLSVCKPKXQVIKEDVSELRX	Drosophila
	ELQKRDALVQKHLLTSLRHKKQVLEEDIN--VQHK-----	Majority
	130 140 150 160	
121	ELQKRDALVQKHLLTSLRHKKQVLEEDIN--VQHK-----	Human
121	ELQKRDALVQKHLLTSLRHKKQVLEEDIN--VQHK-----	Mouse
88	ELQKRDALVQKHLLTSLRHKKQVLEEDIN--VQHK-----	Drosophila
	-----FPADMPGSSLAQLEQASANI PA	Majority
	170 180 190 200	
152	-----FPADMPGSSLAQLEQASANI PA	Human
152	-----FPADMPGSSLAQLEQASANI PA	Mouse
128	GMLCGPGGGMPFPGGTFFRPGNMPGMPFGAMCPGGFMQR	Drosophila
	P-----LKPT	Majority
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174	P-----LKPT	Human
174	P-----LKPT	Mouse
168	PHMLCAGCMQQLRMISFPMPEE	Drosophila

Fig. 1B

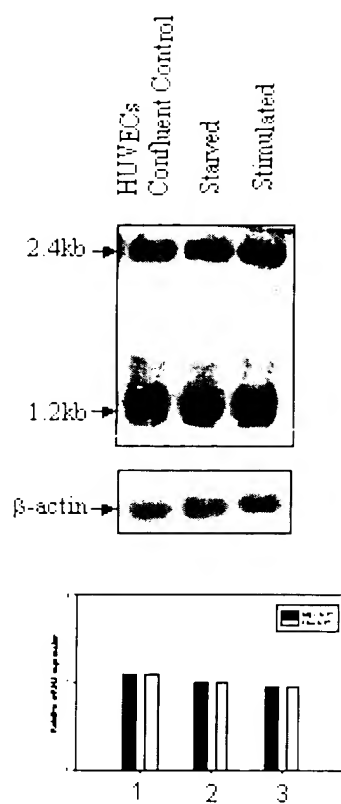


***Fig. 2A***

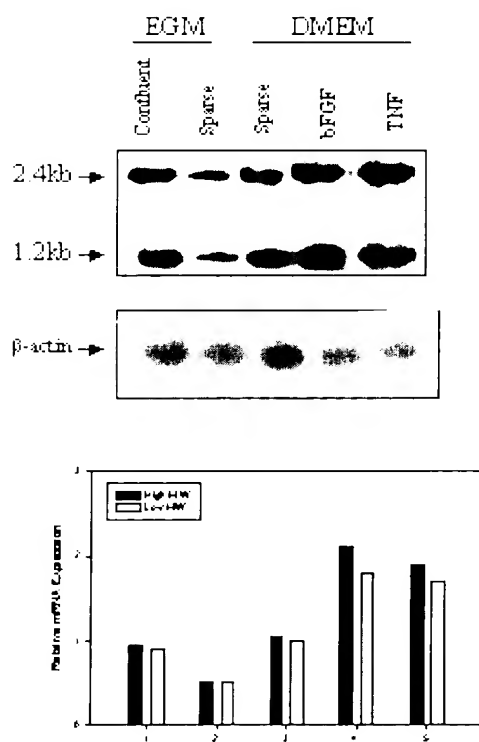
**Fig. 2B**

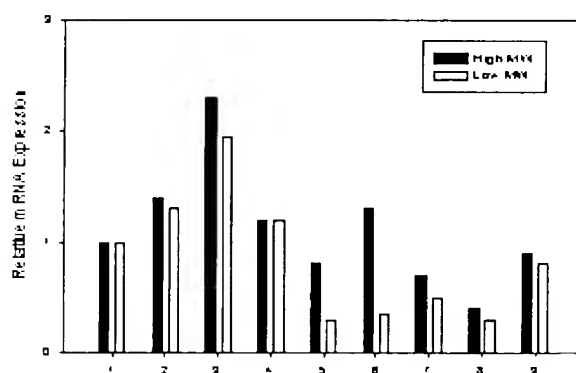
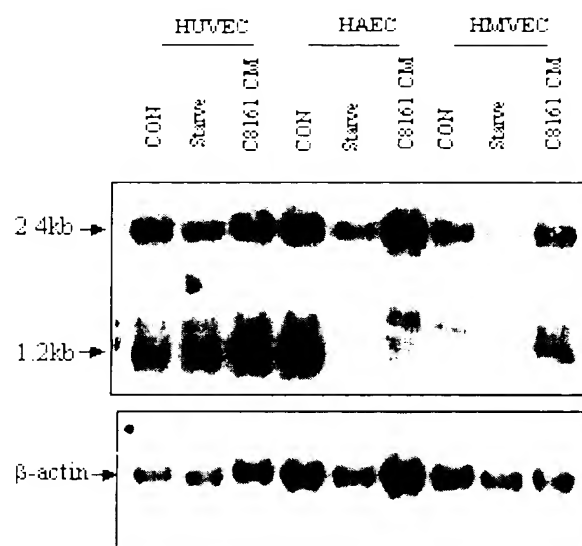


**Fig. 3A**



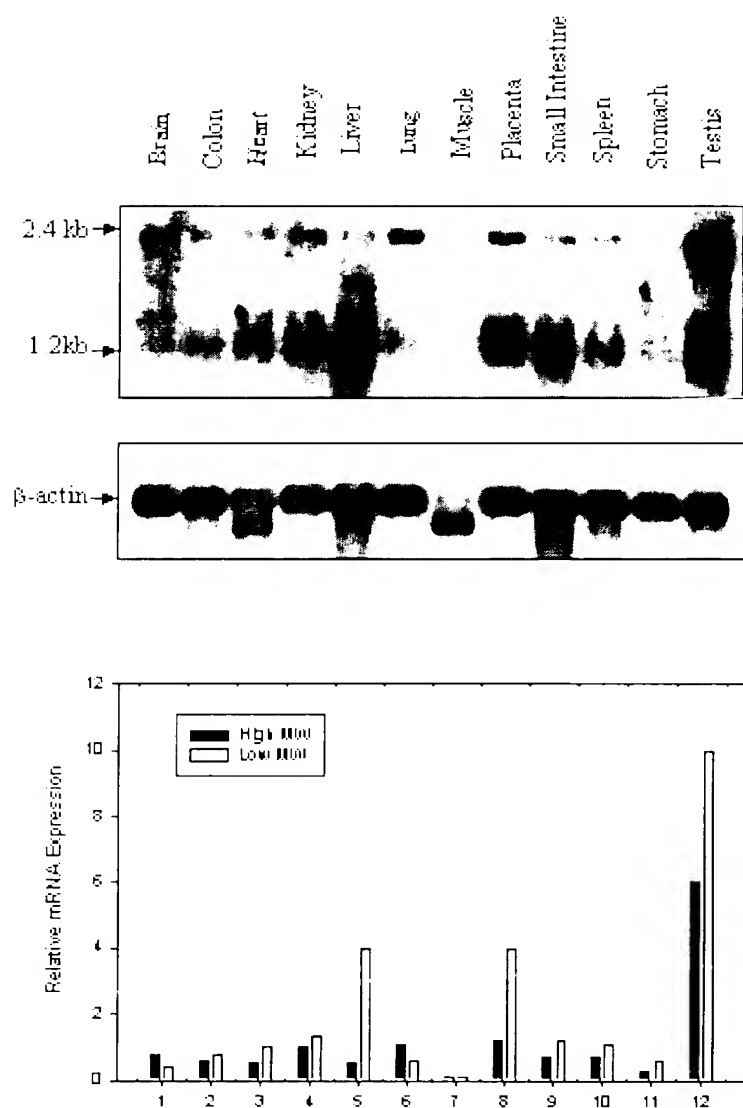
**Fig. 3B**

**Fig. 4**

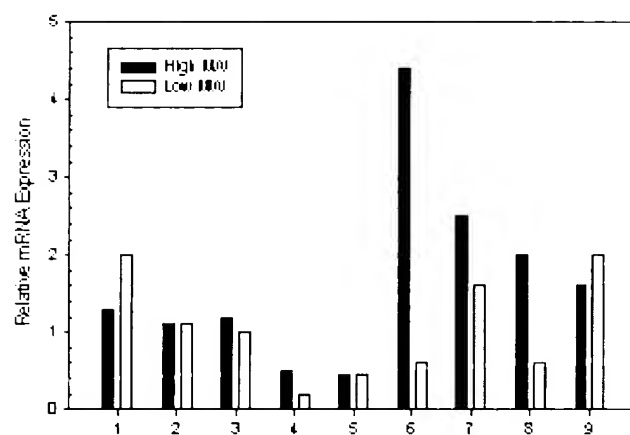
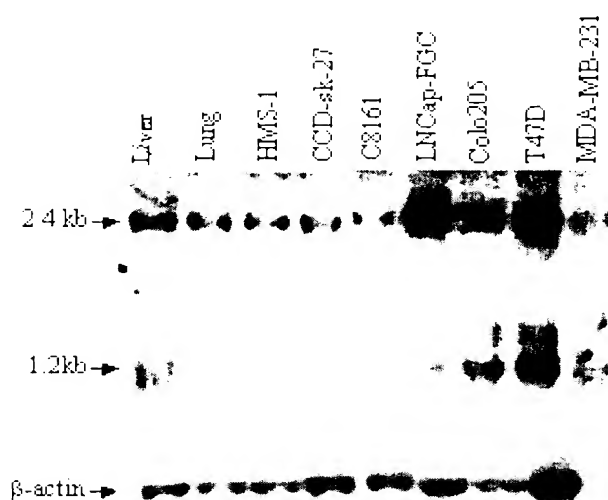


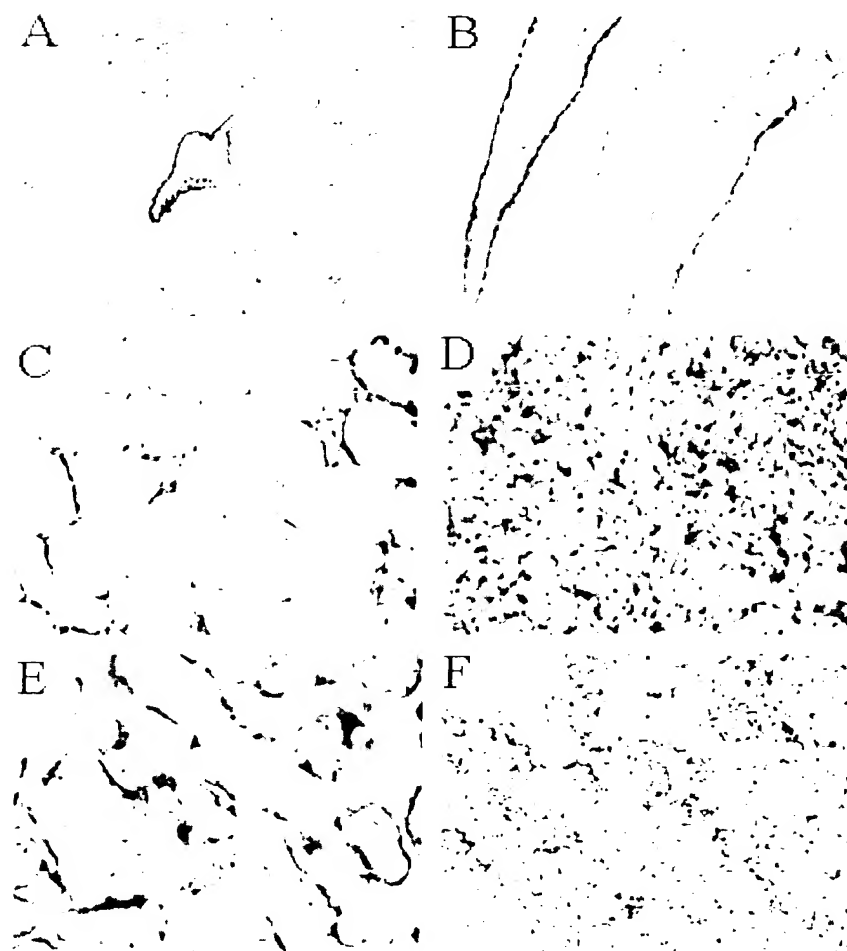
**Fig. 5**



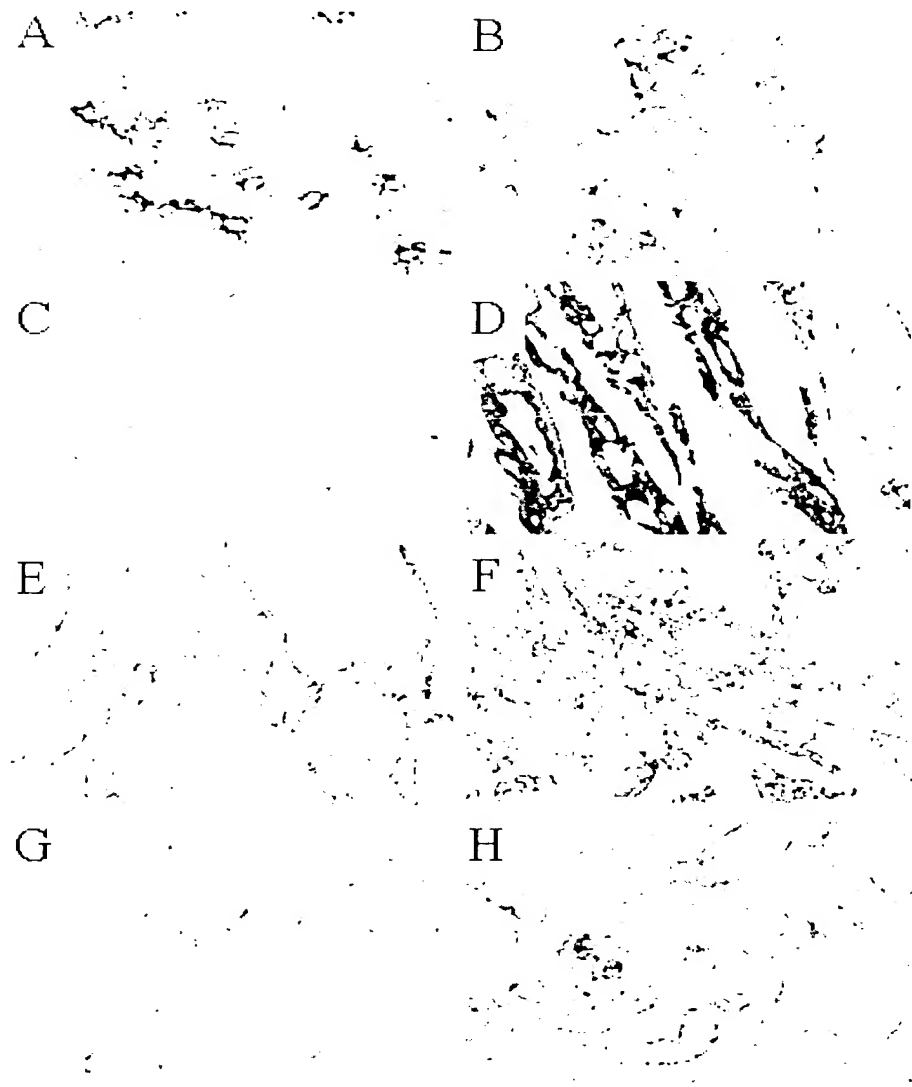


**Fig. 6**

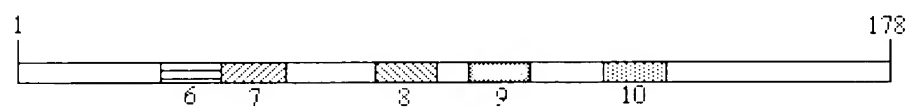
**Fig. 7**



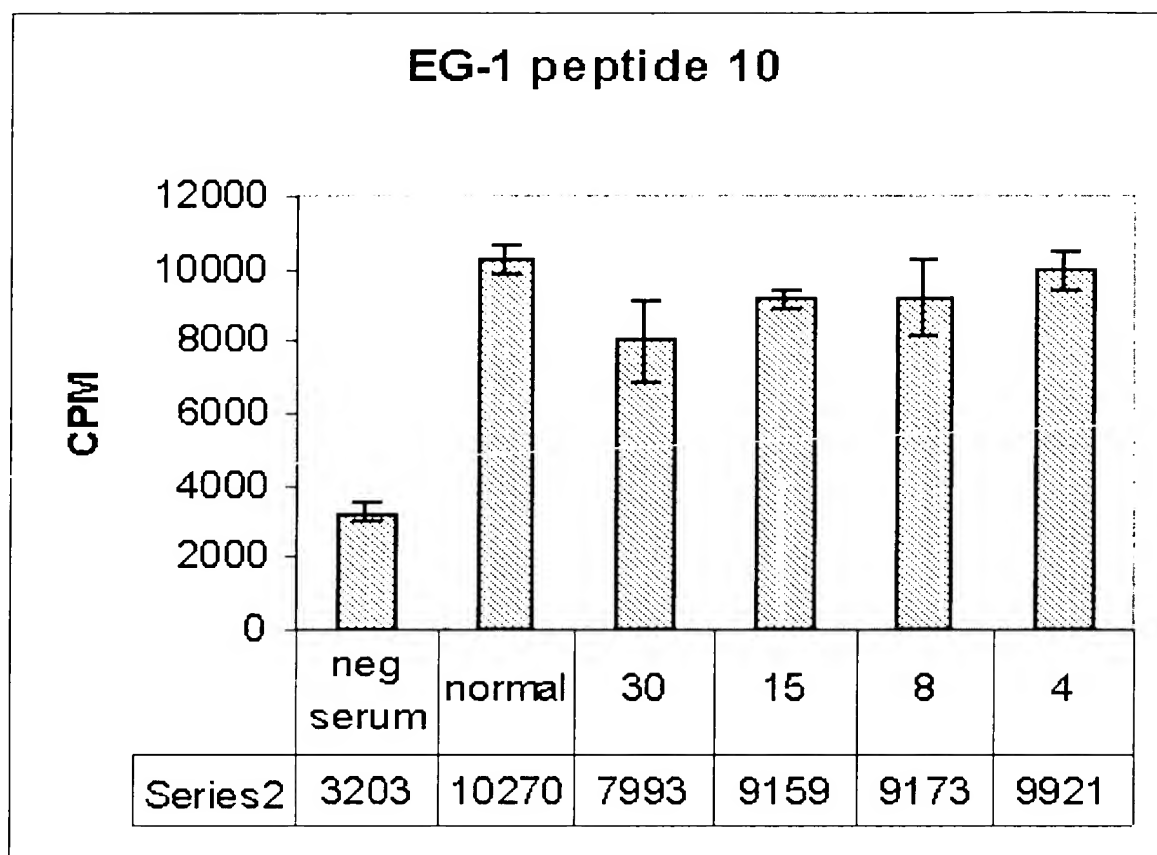
***Fig. 8***



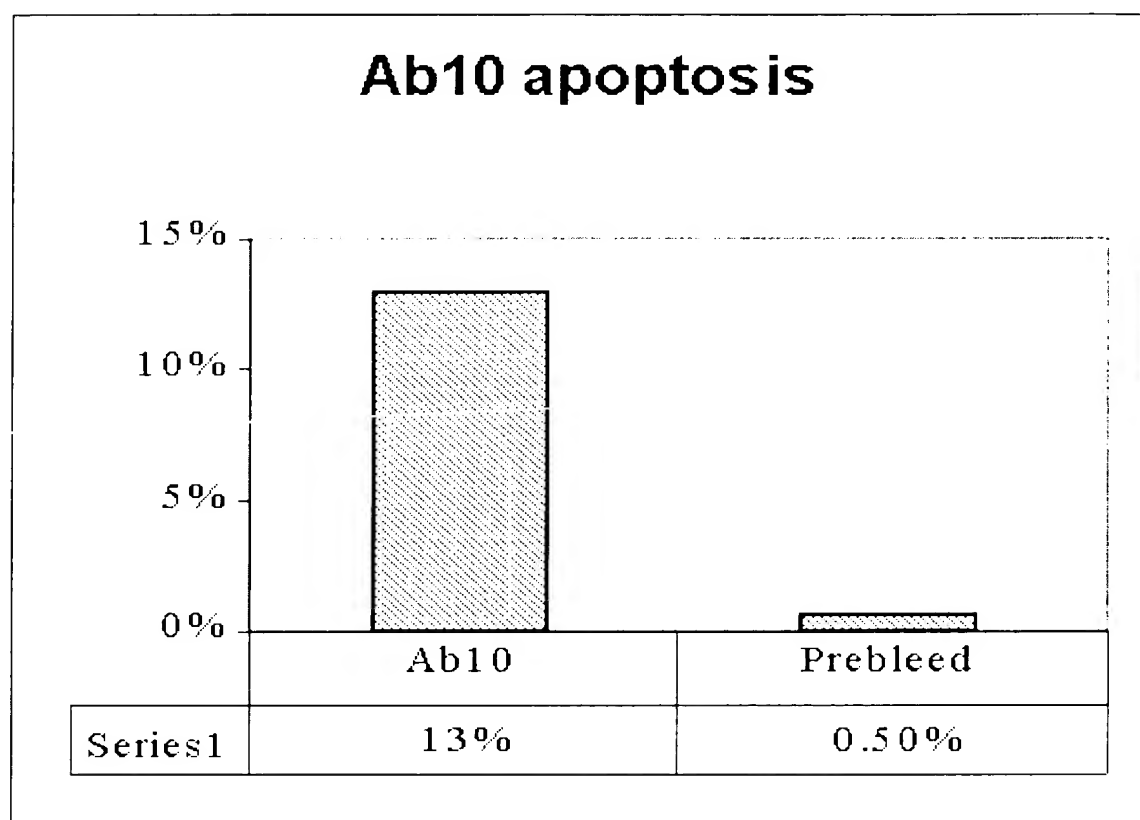
***Fig. 9***



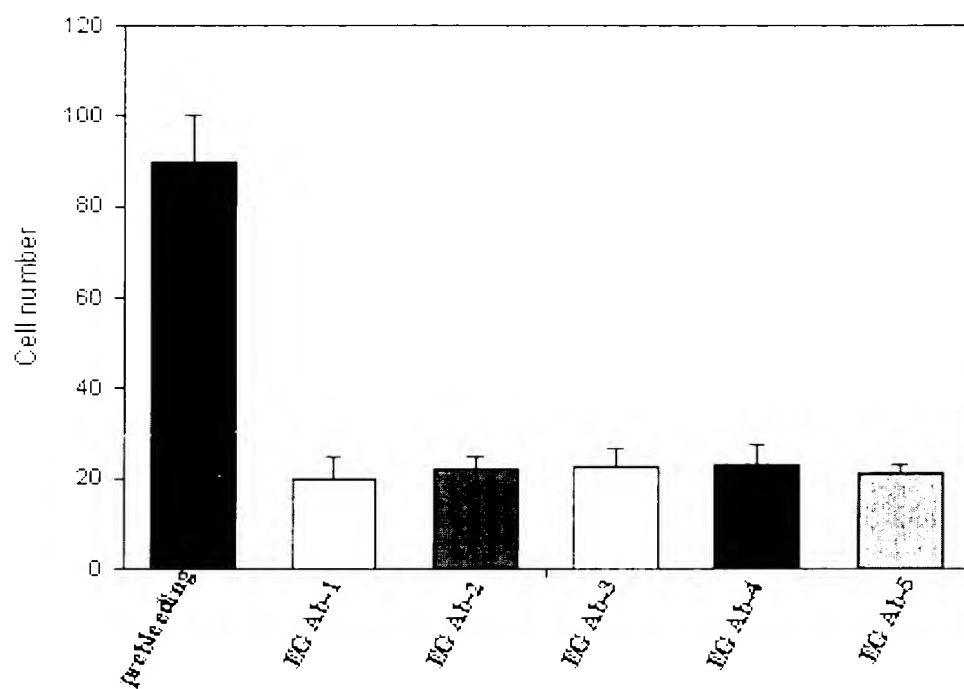
***Fig. 10***



***Fig. 11***

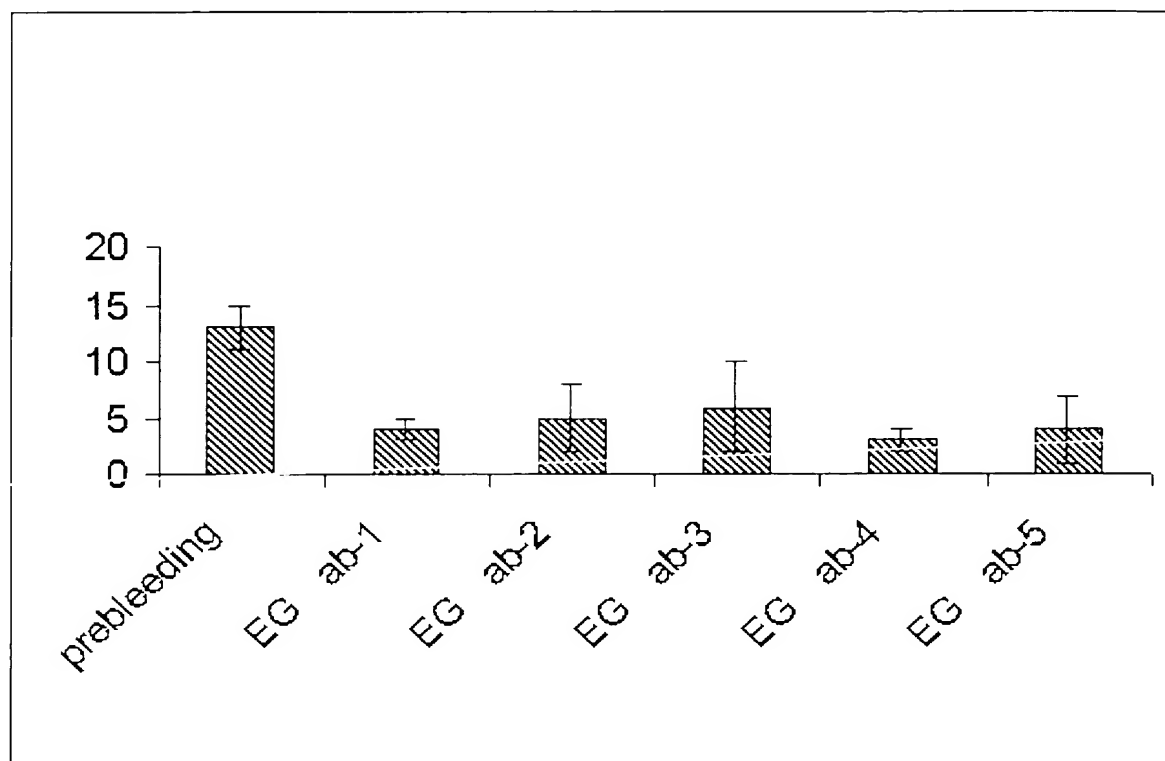


**Fig. 12**



**Fig. 13**





**Fig. 14**

Fig. 15A

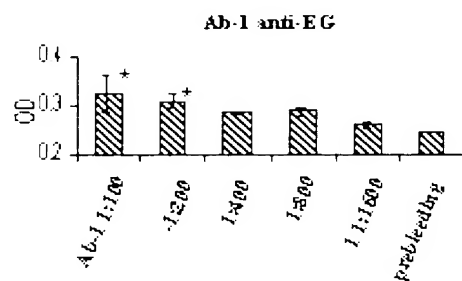


Fig. 15B

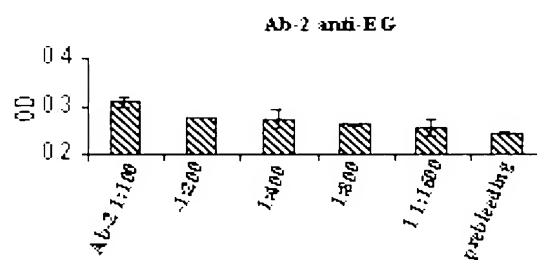


Fig. 15C

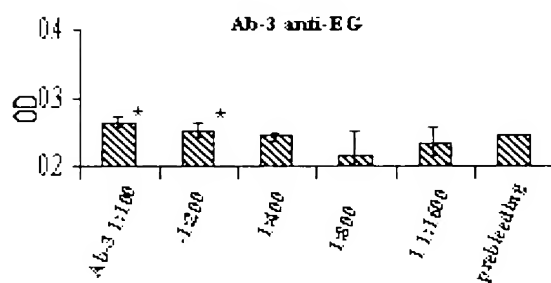


Fig. 15D

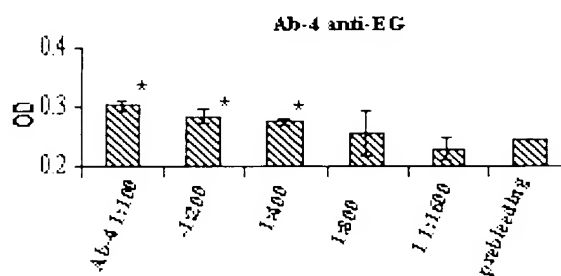
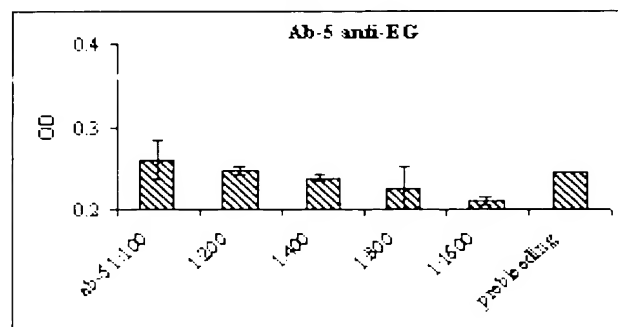
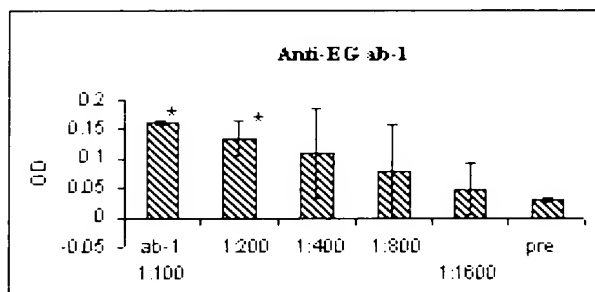
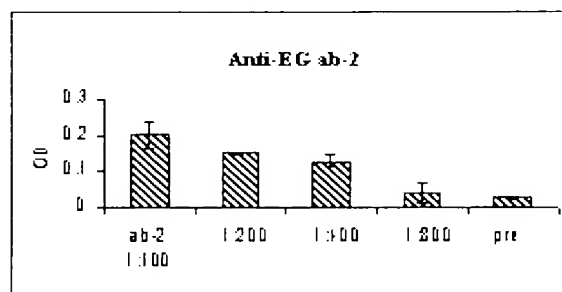
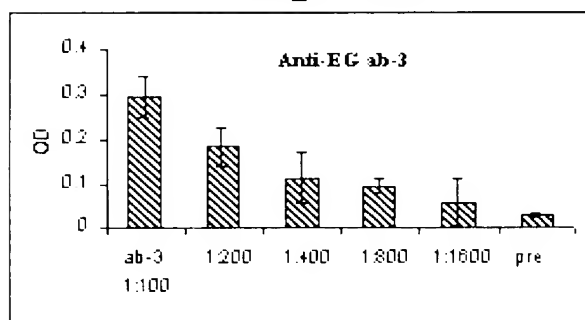


Fig. 15E



**Fig. 16A****Fig. 16B****Fig. 16C****Fig. 16D**